

**REMARKS**

Applicant affirms, with traverse, the provisional election of Group II (claims 15, 22, 24-29, and 32-34 drawn to an antibody). Non-elected claims (claims 4-14, 18-20, 23, 30-31, 35-39, and 44-47), drawn to polynucleotides (Group I), are cancelled, without prejudice to Applicant's option to file a divisional application with respect to the subject matter of these claims.

Claims 15, 22, 25-29, and 33-34 are amended to obviate the indefiniteness rejections under section 112. Claims 24 and 32 are cancelled without prejudice or disclaimer. New dependent claims 48-49 are added to clearly define the method of claim 22. Support for the revisions are found throughout the entire specification. No new matter is included.

Upon entry of the foregoing amendments, claims 15, 22, 25-29, 33-34, and claims 48-49 are presented for consideration.

**Rejection Under 37 C.F.R. § 112, First Paragraph**

Claims 15, 22, 24-29, and 32-34 are rejected under 35 U.S.C. §112, first paragraph, on the basis that the specification fails to provide adequate written description "to support the genus encompassed by the instant claims." According to the Examiner, the claimed invention "reads on a genus of antibodies targeted to a broad genus of nuclear matrix proteins that are encoded by polynucleotides of unknown sequences." Furthermore, the claims "do not recite any particular structural information that may be associated with the genus of sequences encompassed by the claimed invention." (Office Action, page 4, first full paragraph).

Amended claim 15 recites an antibody that binds to six members (written in Markush format) of the claimed nuclear matrix protein or a fragment thereof. It also provides their identities and physical properties, such as molecular weight and pI. Support for this amendment is found in the specification, particularly at page 4, lines 14-20 and page 26, Table 2. Representative antibodies and general methods for producing other antibodies to the isolated proteins recited in the claim are described, as well. Amended claim 22 recites a method for detecting a cell proliferative disorder in a subject using the antibody of claim 15. Accordingly, Applicant has fulfilled the written description requirement as to the claimed subject matter by describing the claimed invention in sufficient detail so that one skilled in the art can clearly conclude that [he] "the inventor invented the claimed invention." *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (1997);

*In re Gosteli*, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989). Therefore, Applicant respectfully submits that the present rejection of claims 15, 22, 24-29, and 32-34 should be withdrawn.

**Rejection Under 37 C.F.R. § 112, Second Paragraph**

Claims 16-17, 22, and 24-29 are allegedly indefinite for failure to include an essential step which, according to the Examiner, is "a correlation or recapitulation step at the end of the claim that restates the preamble" (Office Action, page 6). Applicant would like to point out that claims 16 and 17 were previously cancelled in the Preliminary Amendment and issued in the parent application, U.S. Patent No. 6,232,443.

Claim 22 is amended in accordance with the Examiner's suggestion, thereby mooting the pending rejection under section 112, second paragraph. Accordingly, Applicant respectfully requests the withdrawal of the above rejection.

**CONCLUSION**

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of this application are requested. An early notice in this regard is earnestly solicited. In the event that any issues remain, the Examiner is invited to contact the undersigned with any proposal to expedite prosecution.

Respectfully submitted,

Date Nov. 8, 2001

By Stephen B. Maebius

FOLEY & LARDNER  
Washington Harbour  
3000 K Street, N.W., Suite 500  
Washington, D.C. 20007-5109  
Telephone: (202) 672-5569  
Facsimile: (202) 672-5399

Stephen B. Maebius  
Attorney for Applicant  
Registration No. 35,264

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 19-0741 for any such fees; and applicant(s) hereby petition for any needed extension of time.

**MARKED-UP VERSION SHOWING CHANGES MADE**

**IN THE SPECIFICATION:**

***I. Priority***

After the Application Title, please delete the first full paragraph and insert the following:

[This is a Divisional Application of Application No. No. 09/050,991, filed March 31, 1998.]

**CROSS REFERENCE TO RELATED APPLICATION**

This application is a divisional of U.S. patent application serial No. 09/050,991, filed March 31, 1998, U. S. patent No. 6,232,443, which in turn, claims priority to U.S. provisional application serial No. 60/041,860, filed April 8, 1997.

**IN THE CLAIMS:**

15. (Twice Amended) An antibody which binds to [the] a nuclear matrix protein, or a fragment thereof, [encoded by the nucleotide sequence of claim 4] selected from the group consisting of:

(a) RCCA-1 having a molecular weight of about 53 kD and a pI of about 9.30;

(b) RCCA-2 having a molecular weight of about 32 kD and a pI of about 6.95;

(c) RCCA-3 having a molecular weight of about 27 kD and a pI of about 6.50;

(d) RCCA-4 having a molecular weight of about 20 kD and a pI of about 5.25;

(e) RCCA-5 having a molecular weight of about 15 kD and a pI of about 6.00; and

(f) RCNL-1 having a molecular weight of about 103 kD and a pI of about 8.30, said nuclear matrix protein is present in normal renal cells but absent in cancerous renal cells, or absent in normal renal cells but present in cancerous renal cells.

22. (Twice amended) [The] A method [of claim 18, wherein the reagent is a probe] for detecting a cell proliferative disorder in a subject, comprising contacting a cellular component from the subject with said antibody of claim 15, which binds to a cellular component associated with a cell proliferative disorder, and detecting whether or not the antibody binds to the cellular component.

25. (Amended) The method of claim [24] 22, wherein [the] said antibody is polyclonal.

26. (Amended) The method of claim [24] 22, wherein [the] said antibody is monoclonal.

27. (Amended) The method of claim [24] 22, wherein [the] said antibody is detectably labeled.

28. (Amended) The method of claim 27, wherein [the] said label is selected from the group consisting of a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, and an enzyme.

29. (Amended) A method of treating a cell proliferative disorder associated with a renal matrix protein selected from the group consisting of RCCA-1, RCCA-2, RCCA-3, RCCA-4, RCCA-5, RCNL-1, comprising administering to a subject with [the] said disorder a therapeutically effective amount of said antibody of claim 15, which blocks or enhances the function of said renal matrix protein.

33. (Amended) The method of claim [32] 29, wherein [the] said antibody is monoclonal.

34. (Amended) The method of claim [32] 29, wherein [the] said antibody is polyclonal.